NORTH CAROLINA
Department of Transportation

Tools To Get'R Done

Delivery Projects as Fast as NEPA'ly Possible

Leilani Paugh, Jamille Robbins & Brad Johnson

March 2019

NCDOT Project ATLAS

Advancing **T**ransportation through **L**inkages, **A**utomation, and **S**creening

NCDOT Project ATLAS

Advancing Transportation through Linkages, Automation, and Screening

- What is ATLAS all about?

Overview of ATLAS background and tools
Webinar – February 25th and 26th
EAU Connect Site

Questions – Contact us
ATLAS@ncdot.gov

- What was driving the need for ATLAS?

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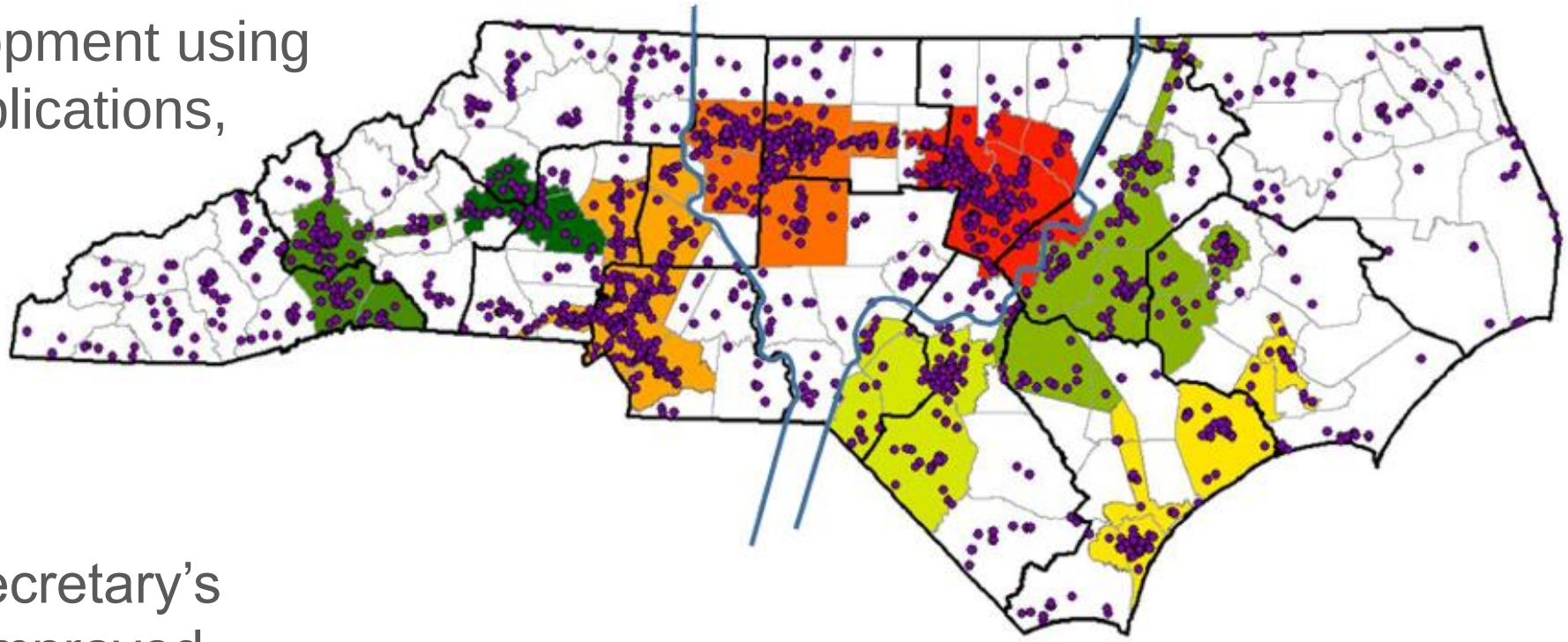
- Goal is to streamline project development using GIS tools, applications, and data



- Adheres to Secretary's Priorities for Improved Program Delivery and Reduced Cash Balance

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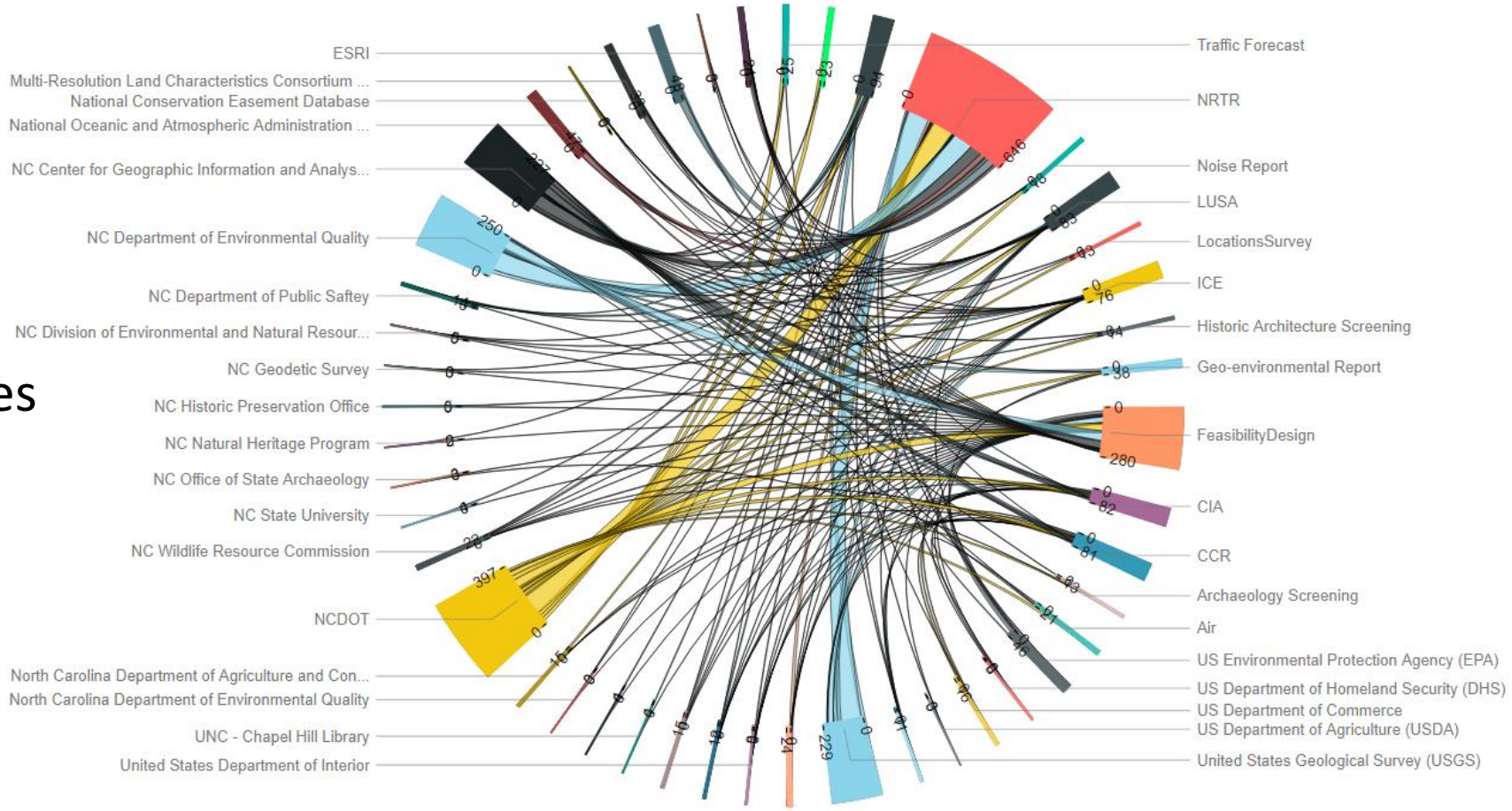
Data Sources



Data Uses

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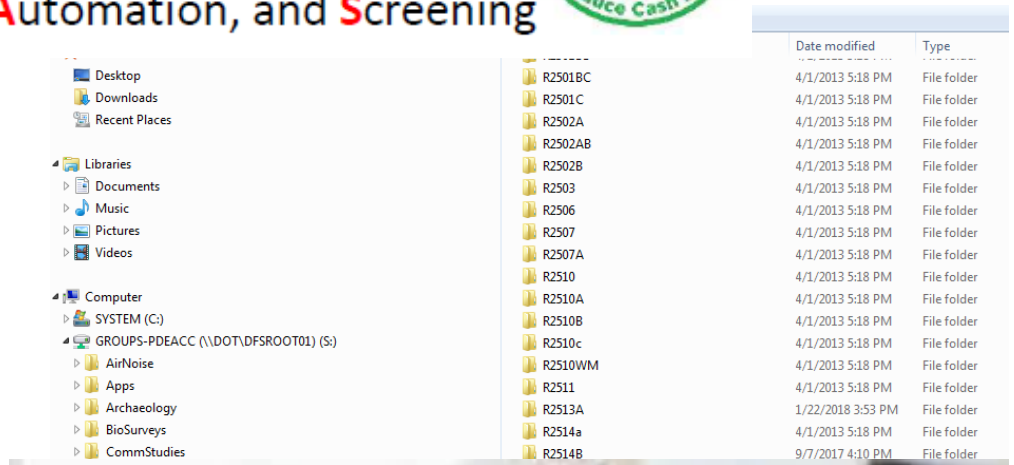

Linkages

Where are the data used for that project?

6

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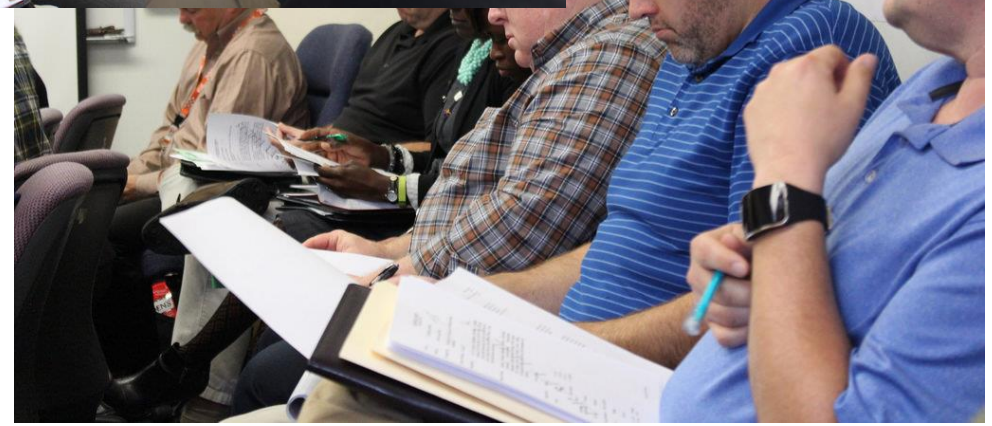
Screening
What do we know about this project?



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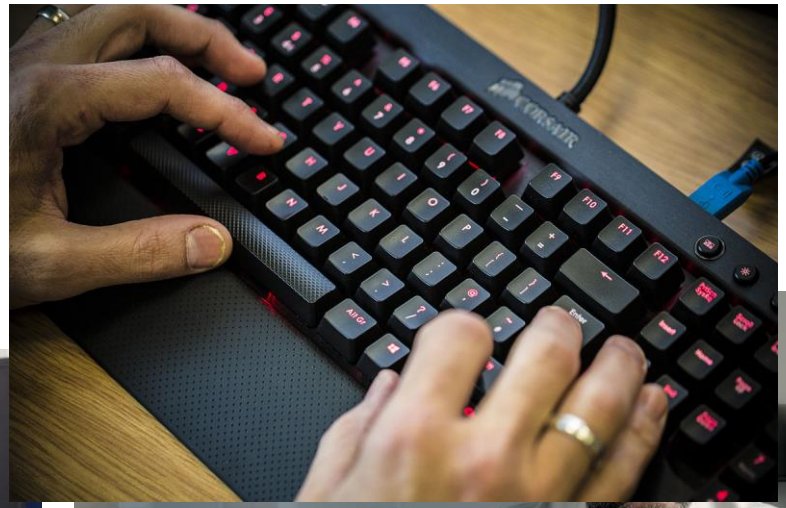
- *Automation*

Isn't there a better way to do this report?



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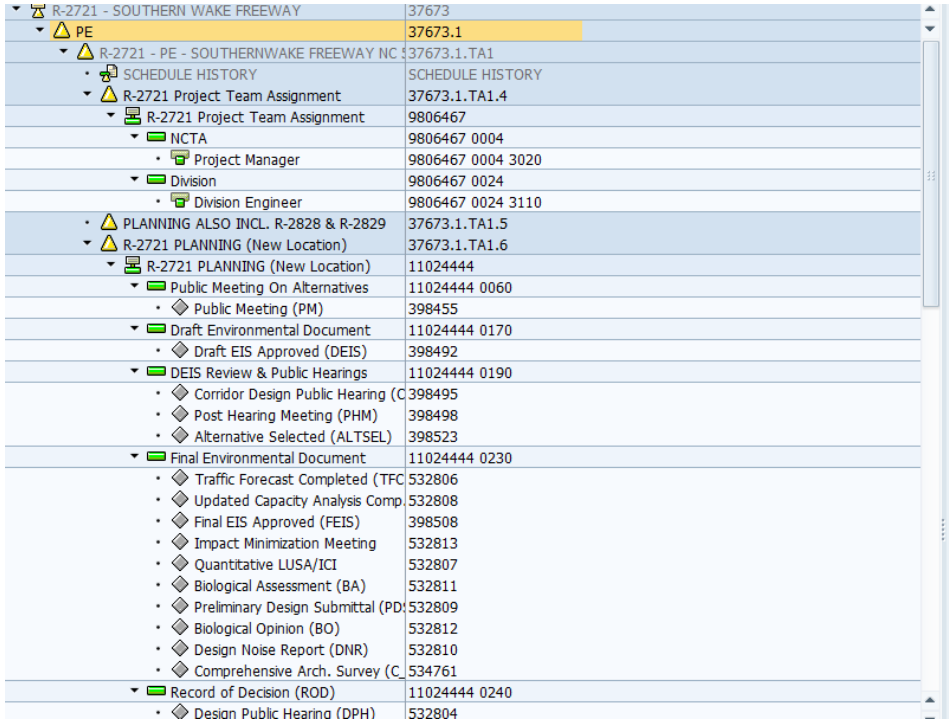
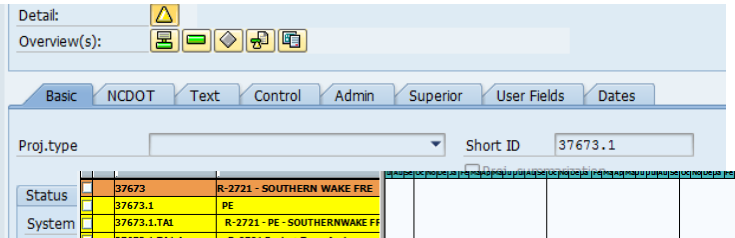
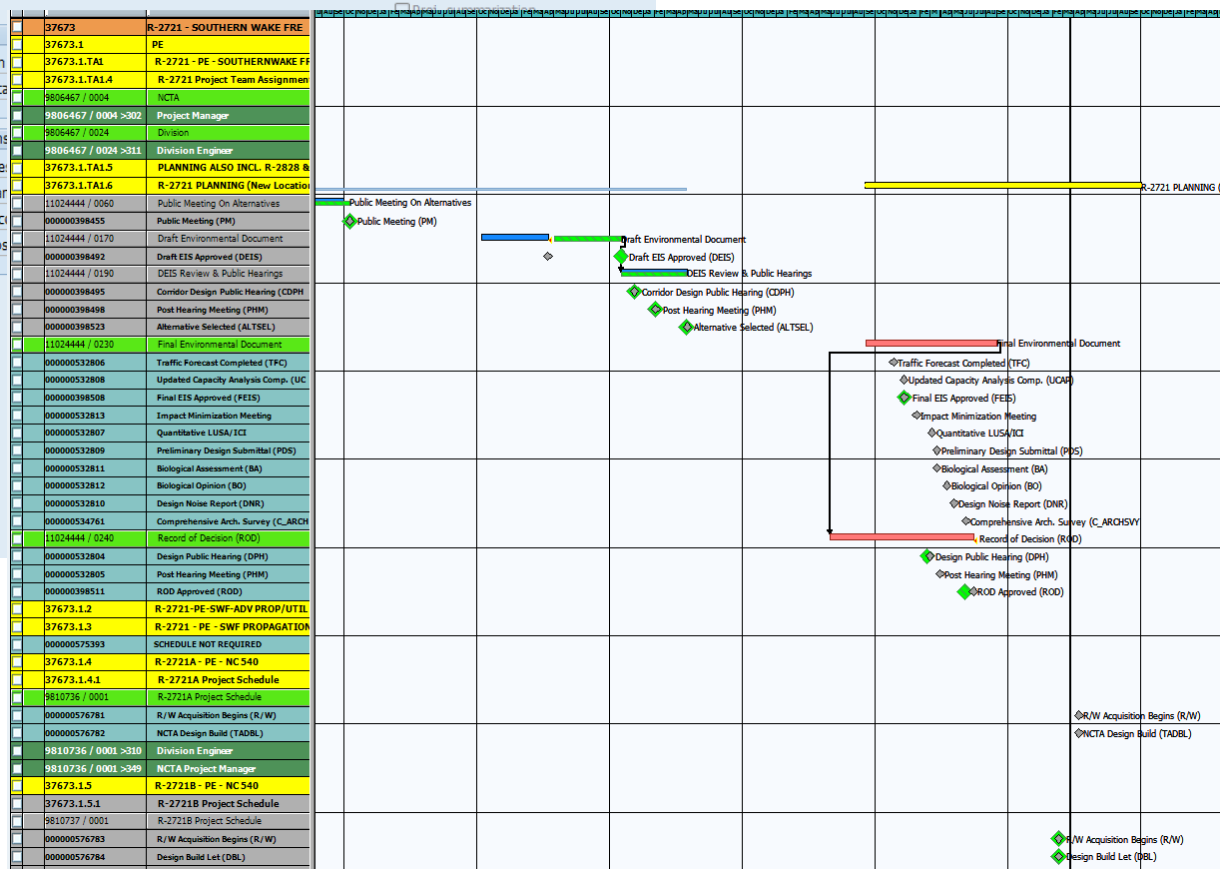


R-2721 - SOUTHERN WAKE FREEWAY	37673
PE	37673.1
R-2721 - PE - SOUTHERNWAKE FREEWAY NC	37673.1.TA1
SCHEDULE HISTORY	SCHEDULE HISTORY
R-2721 Project Team Assignment	37673.1.TA1.4
R-2721 Project Team Assignment	9806467
NCTA	9806467 0004
Project Manager	9806467 0004 3020
Division	9806467 0024
Division Engineer	9806467 0024 3110
PLANNING ALSO INCL. R-2828 & R-2829	37673.1.TA1.5
R-2721 PLANNING (New Location)	37673.1.TA1.6
R-2721 PLANNING (New Location)	11024444
Public Meeting On Alternatives	11024444 0060
Public Meeting (PM)	398455
Draft Environmental Document	11024444 0170
Draft EIS Approved (DEIS)	398492
DEIS Review & Public Hearings	11024444 0190
Corridor Design Public Hearing (C	398495
Post Hearing Meeting (PHM)	398498
Alternative Selected (ALTSEL)	398523
Final Environmental Document	11024444 0230
Traffic Forecast Completed (TFC	532806
Updated Capacity Analysis Comp	532808
Final EIS Approved (FEIS)	398508
Impact Minimization Meeting	532813
Quantitative LUSA/ICI	532807
Biological Assessment (BA)	532811
Preliminary Design Submittal (PD	532809
Biological Opinion (BO)	532812
Design Noise Report (DNR)	532810
Comprehensive Arch. Survey (C_	534761
Record of Decision (ROD)	11024444 0240
Design Public Hearing (DPH)	532804





Are my deliverables on time for my project?

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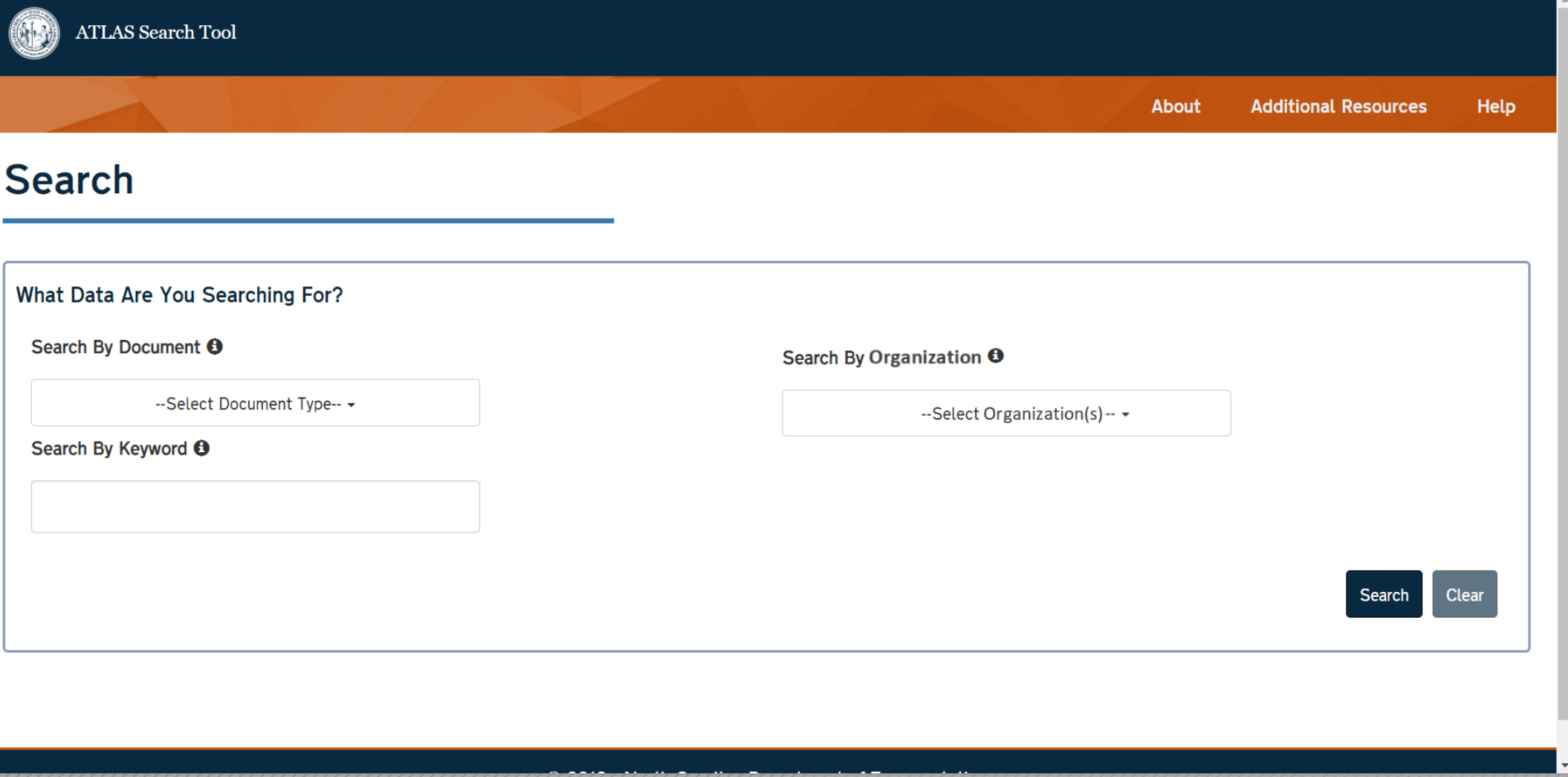

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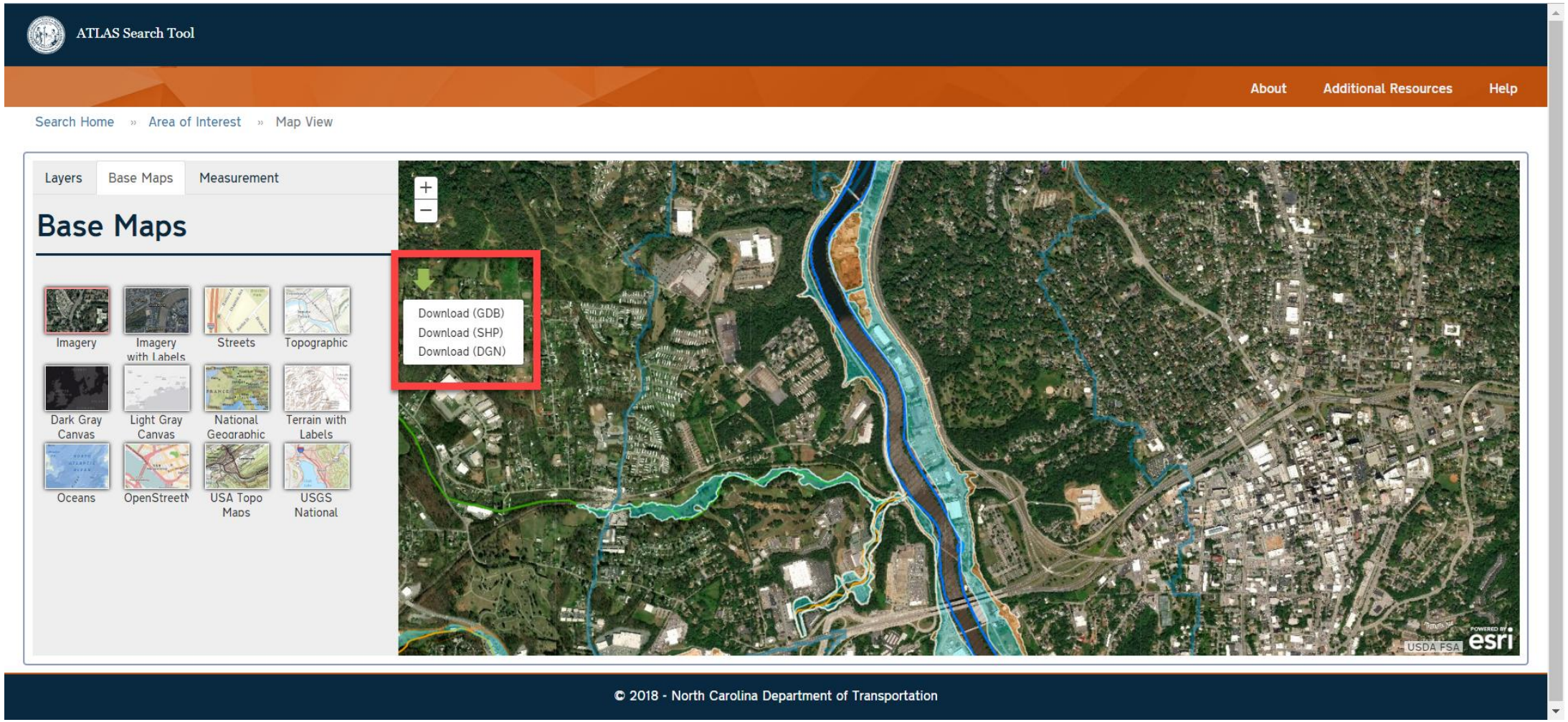

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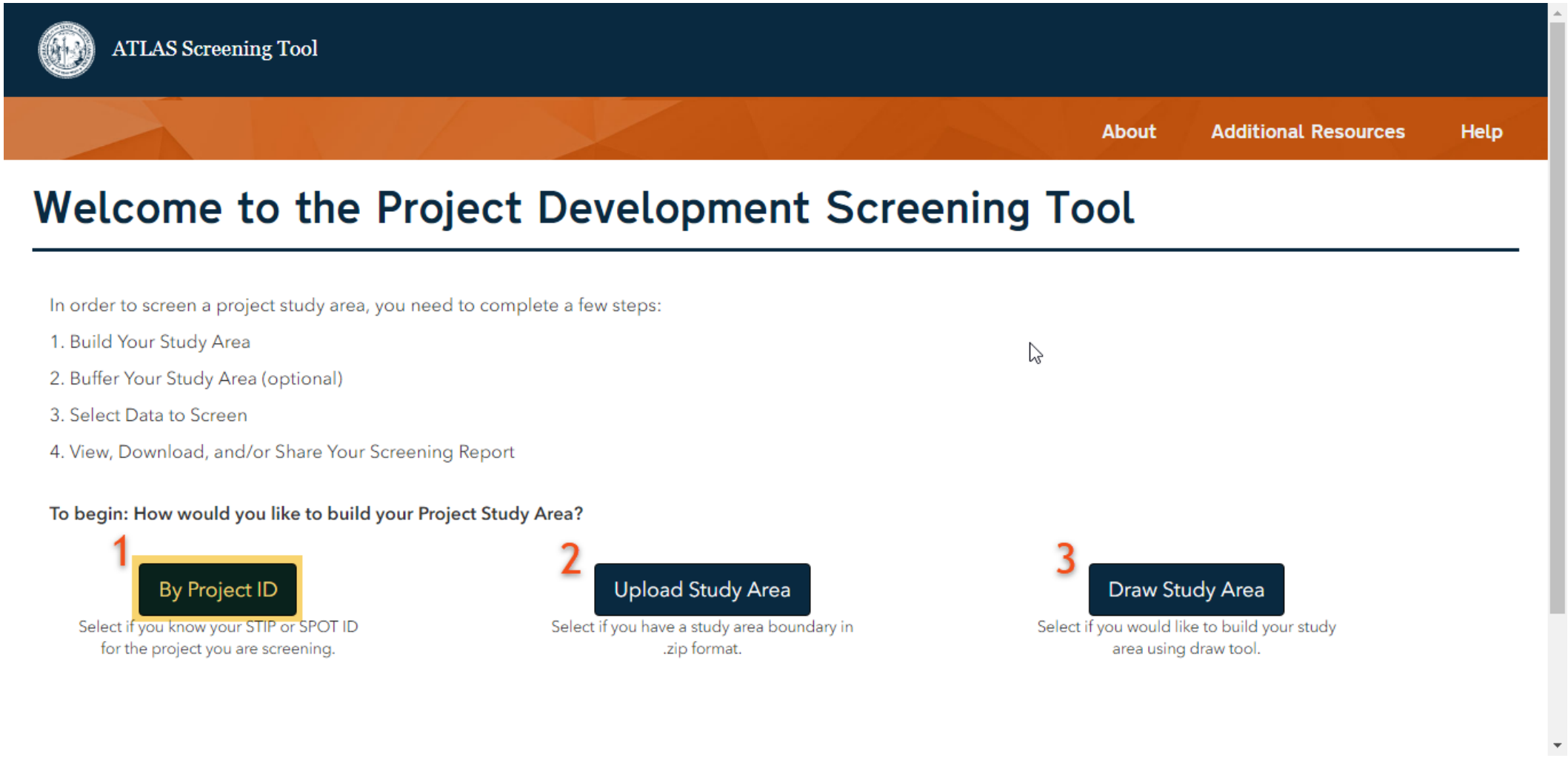

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Project Development Screening Report

ACEC Presentation Screening - U-5891

Report Description:

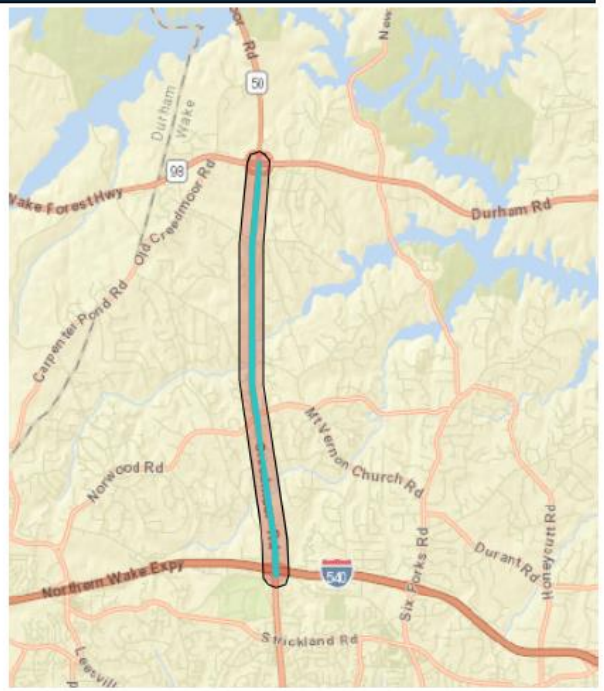
ATLAS screening for ACEC presentation for U-5891.

Buffer Size: 1000 Feet

STIP/SPOT ID: U-5891, H090577

STIP/SPOT Description:

U-5891: I-540 TO NORTH OF NC 98. WIDEN TO MULTILANE DIVIDED ROADWAY.



Summary of Potential Impacts

Impact Type	Potential Impacts
Conservation Area	Yes
Fish and Aquatics	No
Hydrography	Yes

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303d and 305b Streams (ESM Layer)	7	8778.0 ft	529.7 ft
FEMA Stream Study Type (ESM Layer)	5	11245.5 ft	476.9 ft
NC DEQ Water Supply Watershed IV	4	10855.4 ft	529.7 ft
USGS 24K Streams 2014	4	8778.0 ft	529.7 ft
NC DEQ Water Supply Watersheds	2	1053.6 ac	N/A
NC DEQ Draft 303d Category 5 Assessments	1	3834.1 ft	N/A
DWR Trout Waters 2014 (ESM Layer)	0	0 ft	0
High Quality Water and Outstanding Resource Water Management Zones	0	0 ac	0
NC Wild and Scenic Rivers	0	0 ft	0
NOAA Designated Critical Resource Waters	0	0 ac	0
USDA Forest Service Wild and Scenic Rivers	0	0 ft	0
WRC Trout Waters	0	0 ft	0
Physiography	**Count**	**Total Coverage**	**Nearest**
NCDOT SSURGO Soils	144	1053.6 ac	17.5 ft
US EPA Level III Ecoregions	1	1611.4 ac	N/A
US EPA Level IV Ecoregions	1	1611.4 ac	N/A
Utilities	**Count**	**Total Coverage**	**Nearest**
NC Public Water Supply Water Sources	5	N/A	461.6 ft
NC Water Supply intakes	5	N/A	461.3 ft
NC Surface Water Intakes	0	N/A	0
Sanitary Sewer Systems - Land Application Areas	0	N/A	0
Sanitary Sewer Systems - Pumping Stations	0	N/A	0
Water Distribution Systems - Water Pumping Stations	0	N/A	0

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Map | Workbench | About | Additional Resources | Help

- Basic Project Info
- Scoping ✔
- Public/Local Involvement ✔
- Merger ✔
- Survey & Photogrammetry ✔
- Traffic ✔
- Community Characteristic Report (CCR) ✔
- Natural Resources ✔
- Indirect & Cumulative Effects (ICE) ✔
- Air Quality ✔
- Noise Analysis ✔
- Cultural Resources ✔
- Geo-Environmental ✔
- Land Use Scenario Assessment (LUSA) ✔
- Community Impact Assessment (CIA) ✔
- Project Conclusion ✔

Natural Resources ✔

Is Natural Resources required?

(•) Yes ( ) No

a. Natural Resources:

* Was Jurisdictional Area Delineation completed?

( ) Yes ( ) No

* Were T&E surveys completed?

( ) Yes ( ) No

* What effect will the project have on Threatened and Endangered Species or their critical habitat?

* Select species that are potentially impacted:

None selected

* Are there any species for which biological conclusions are unresolved?

( ) Yes ( ) No

If so, which and why?

* Has the USFWS requested a Biological Assessment during Section 7 consultation?

( ) Yes ( ) No

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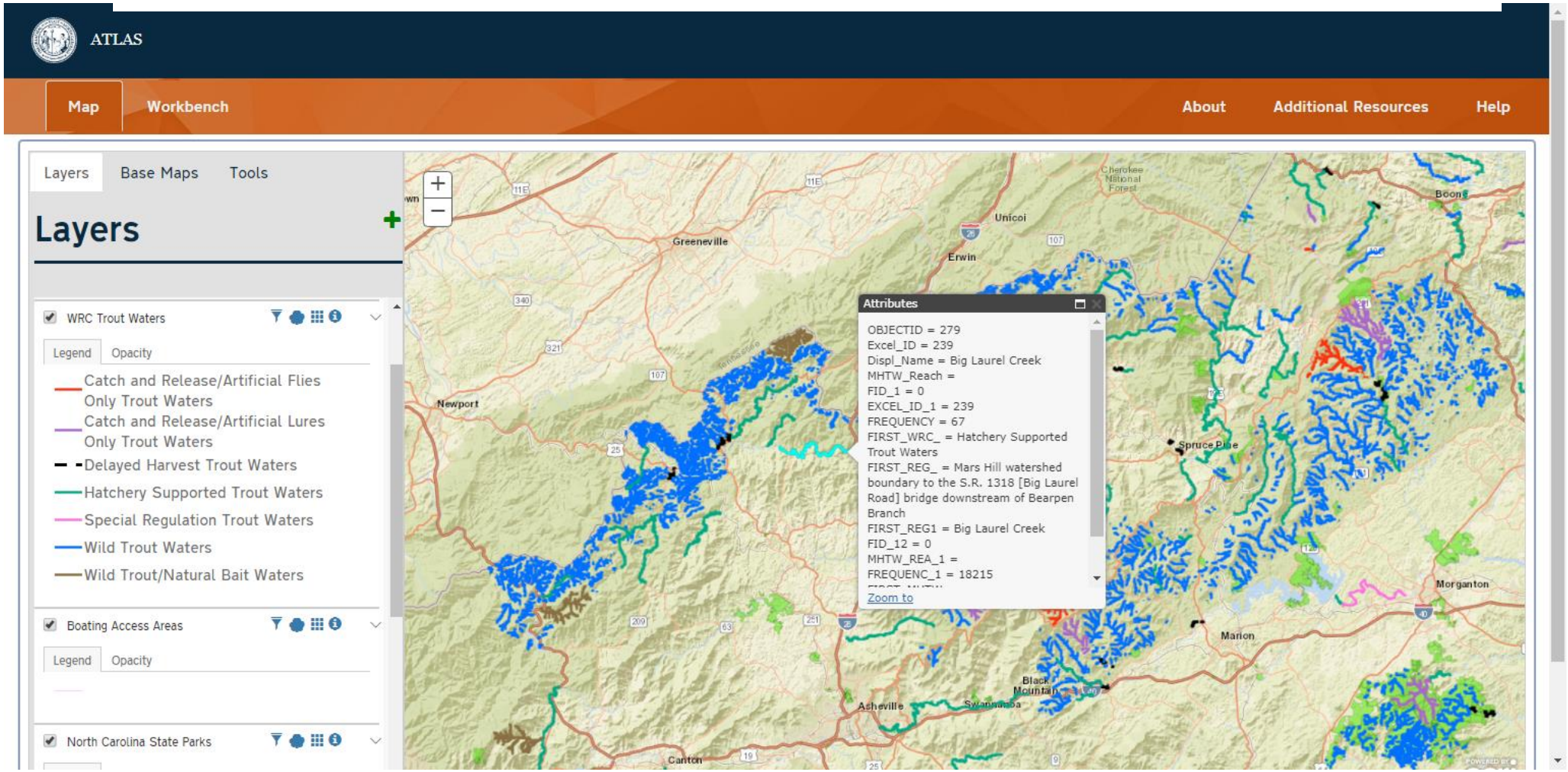

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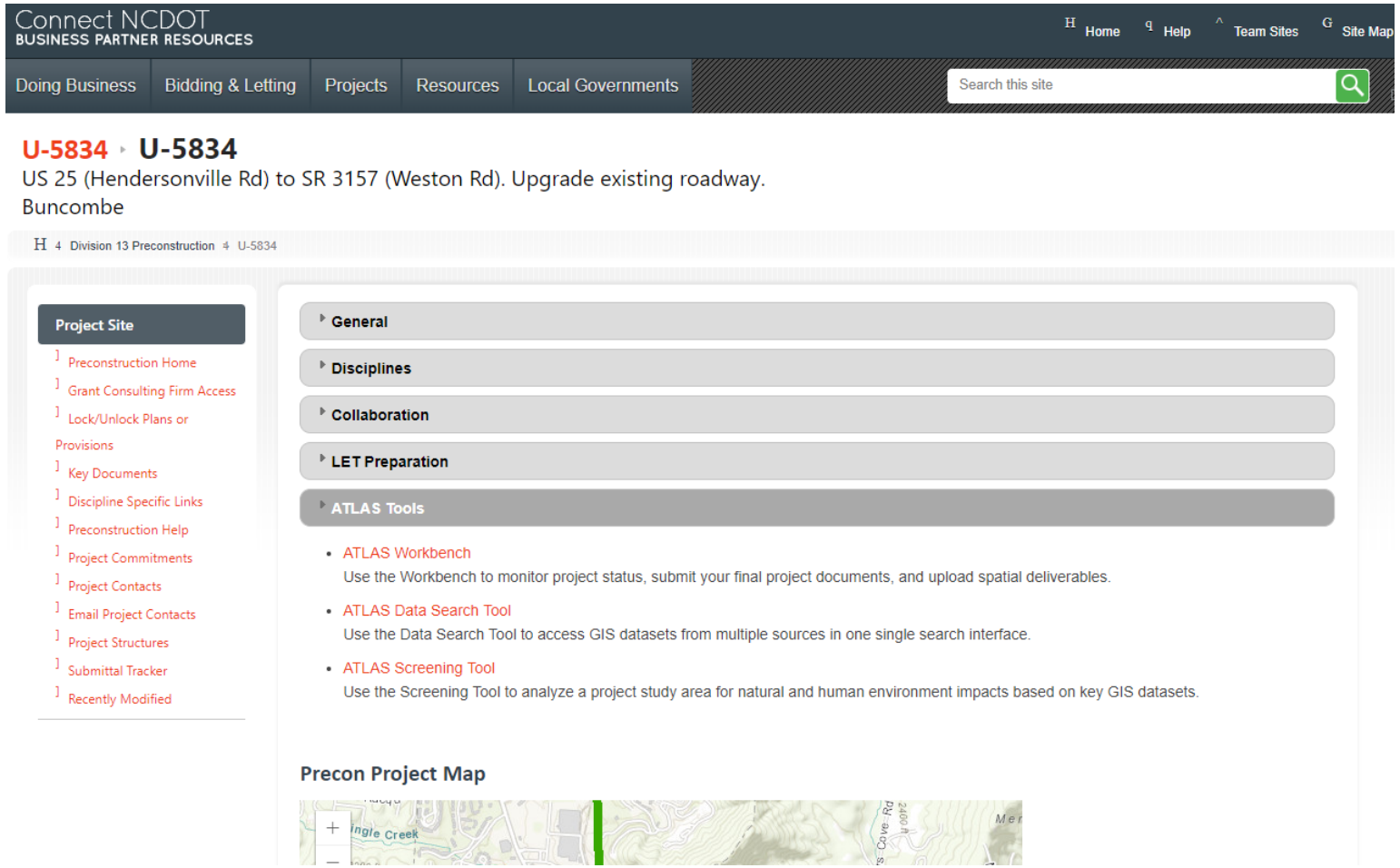

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Some Frequently Asked Questions

- Can we customize for our projects?
- Can we add data layers later?
- Can we make changes in workflows to match new policies and procedures?
- Can we add our business unit workflow?
- Can we use ATLAS for non STIP projects? For Non-Highway projects? For Division Managed project? For unfunded projects?....

YES!

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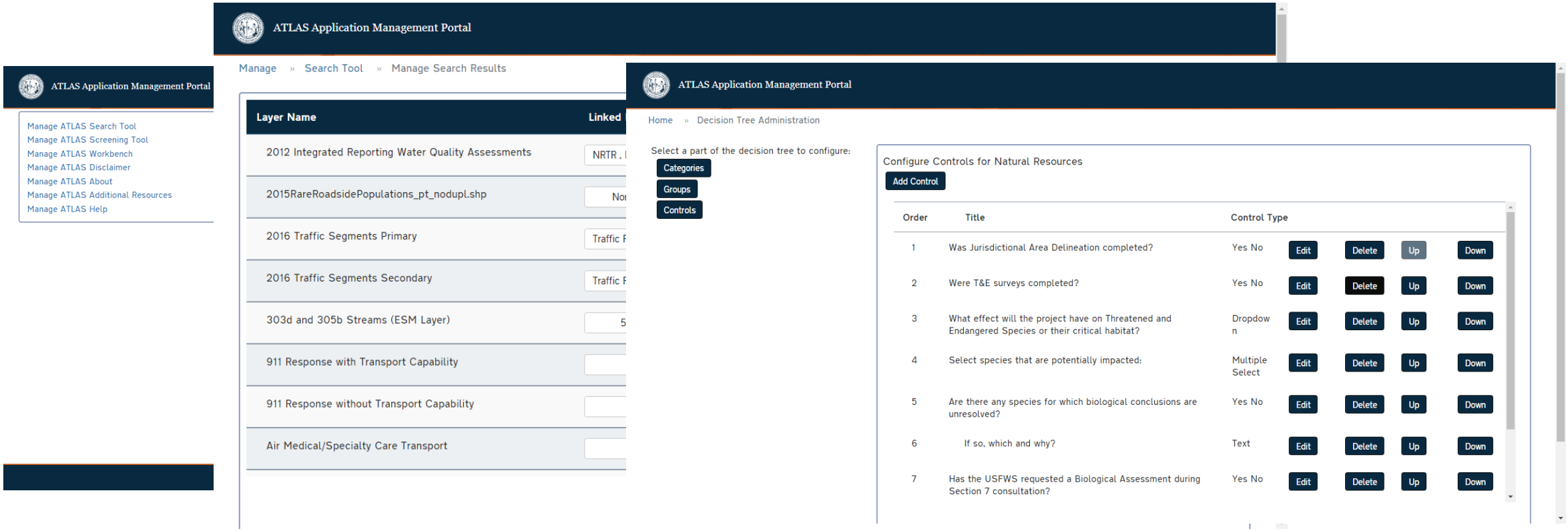
Application Management Tool



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BUT!

We must follow standards to make it work!

Standards Document

- Section for each type of document and data layer on naming conventions, metadata, etc.
- Need to incorporate into consultant contracts, deliverables, and expectations.

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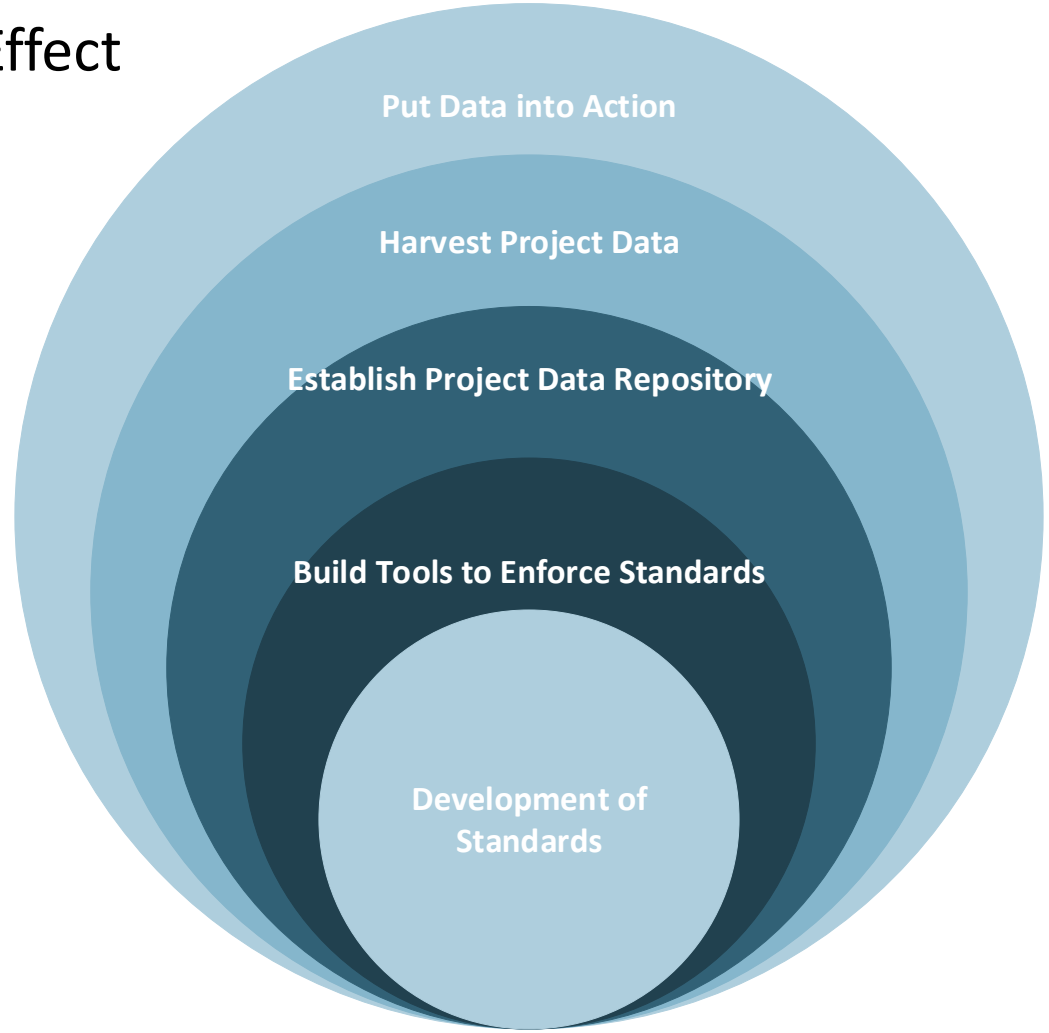
Workbench: Snowball Effect



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Go Live scheduled for May 31, 2019

Training to immediately follow through June and July
Regional one day hands-on sessions
8:00 am - 4:00 pm with optional 4:00 - 6:00 lab

Washington
Wilmington
Raleigh
Winston-Salem
Charlotte
Asheville
Brevard

Virtual Public Involvement

Public Involvement

- Is a Fundamental component of effective transportation planning and project development
- Is an Opportunity for a voice
- Is a critical source of information for NCDOT

Why Use Online Tools?

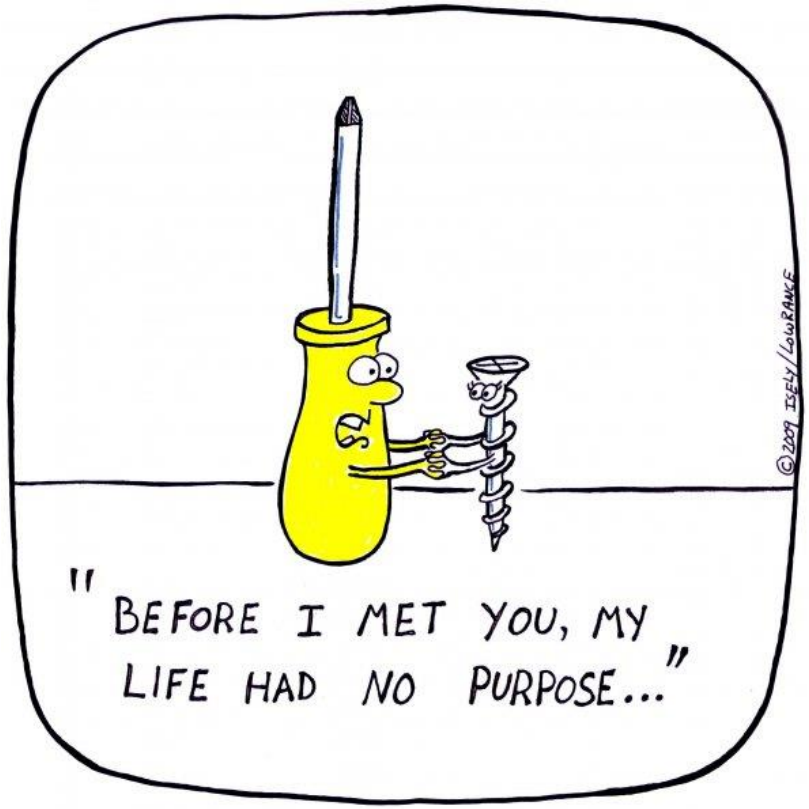
- Public Involvement is multifaceted and hard to quantify
- Interest in ensuring that all voices are heard
- Transparency
- Reduced Cost per Participant
- Unify various other strategies

Current Toolbox

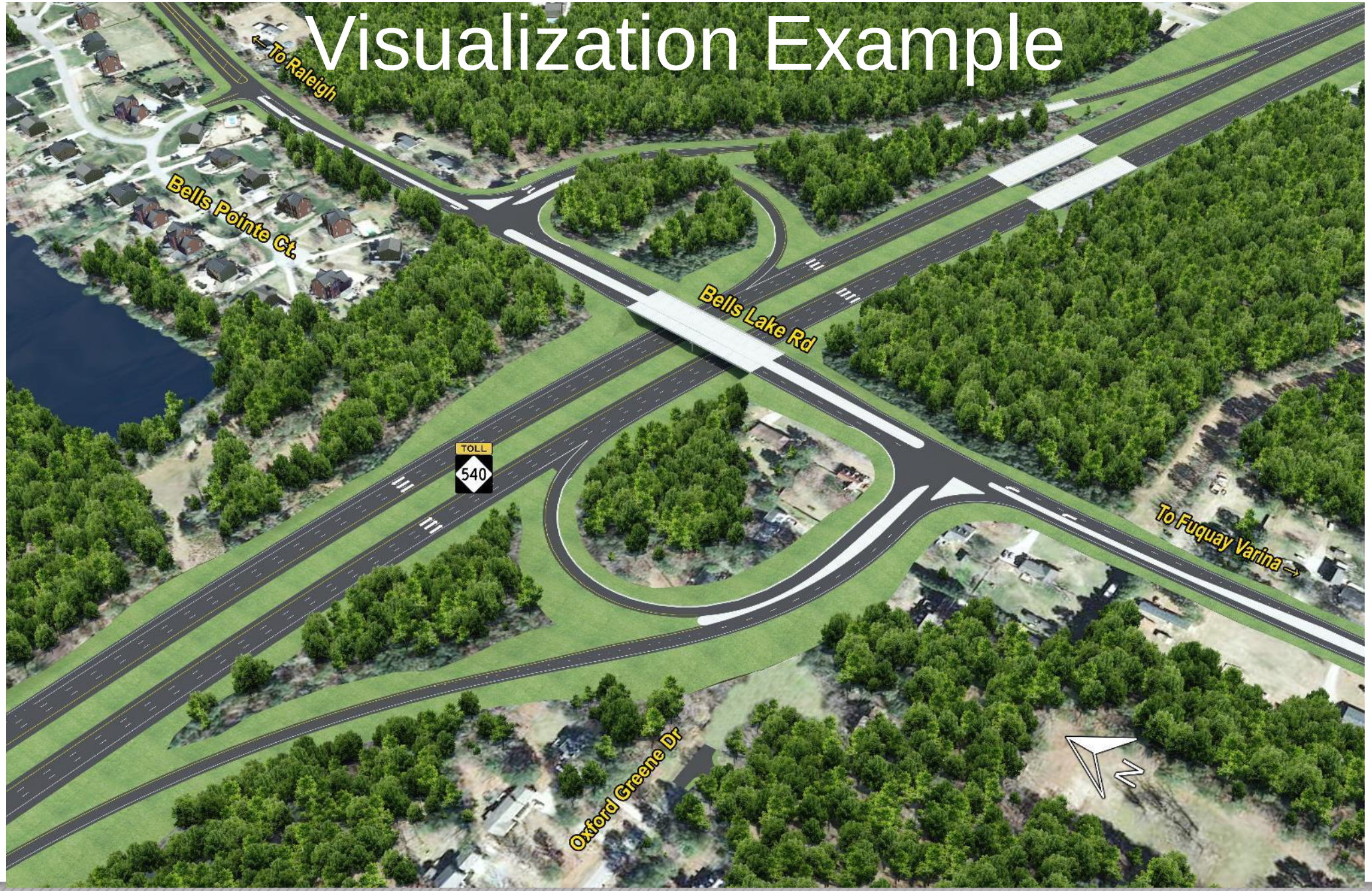
- Project Websites
- Social Media
- Visualizations
  - Photo Simulations
  - Renderings / Conceptual Images
  - Animated Designs (Traffic Flows / Patterns)
  - Visual Surveys

Current Toolbox

- Videos
- Webinars/Live Streaming
- Online Public Engagement
- Geo-fencing/Geo-targeting

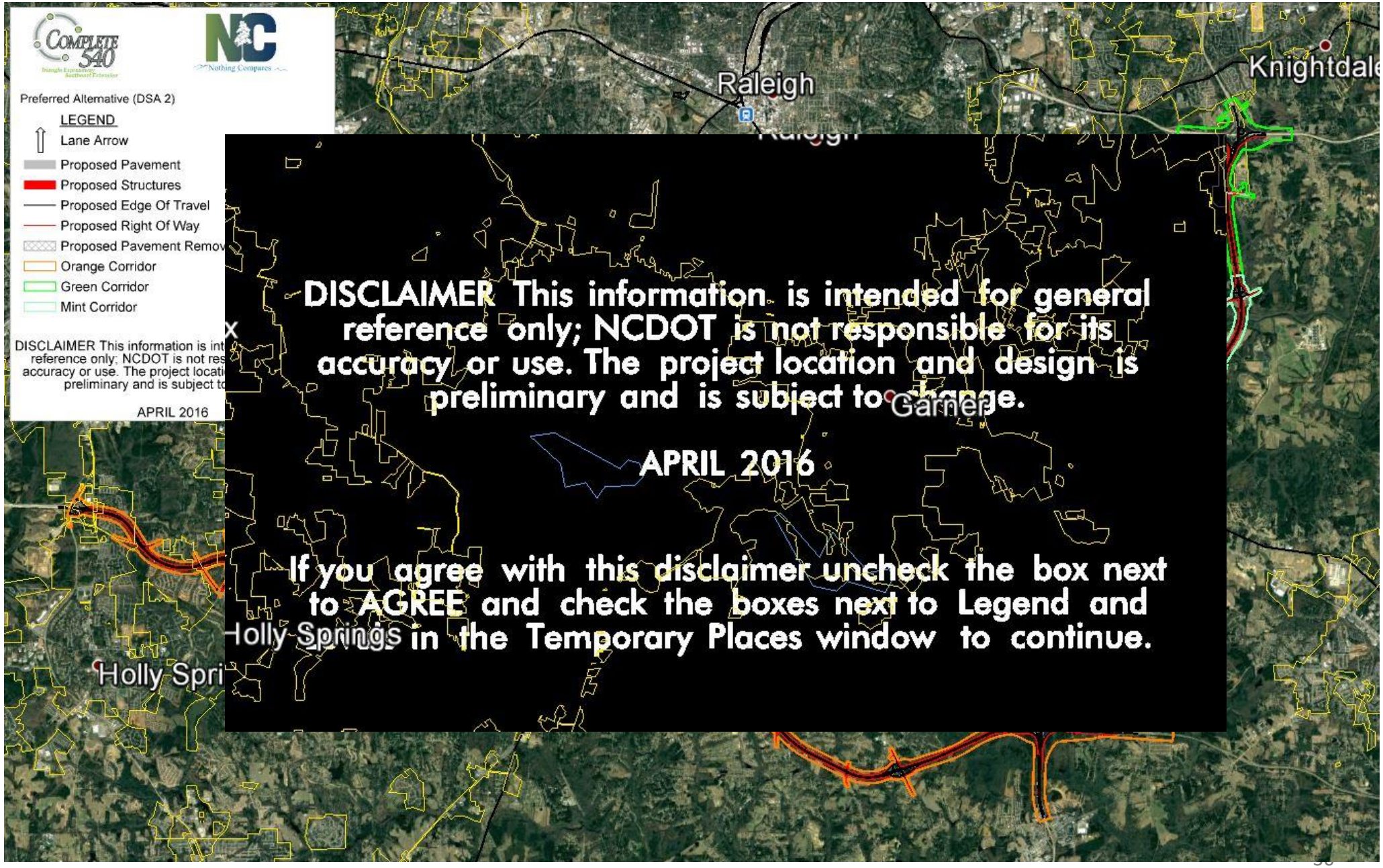


Visualization Example

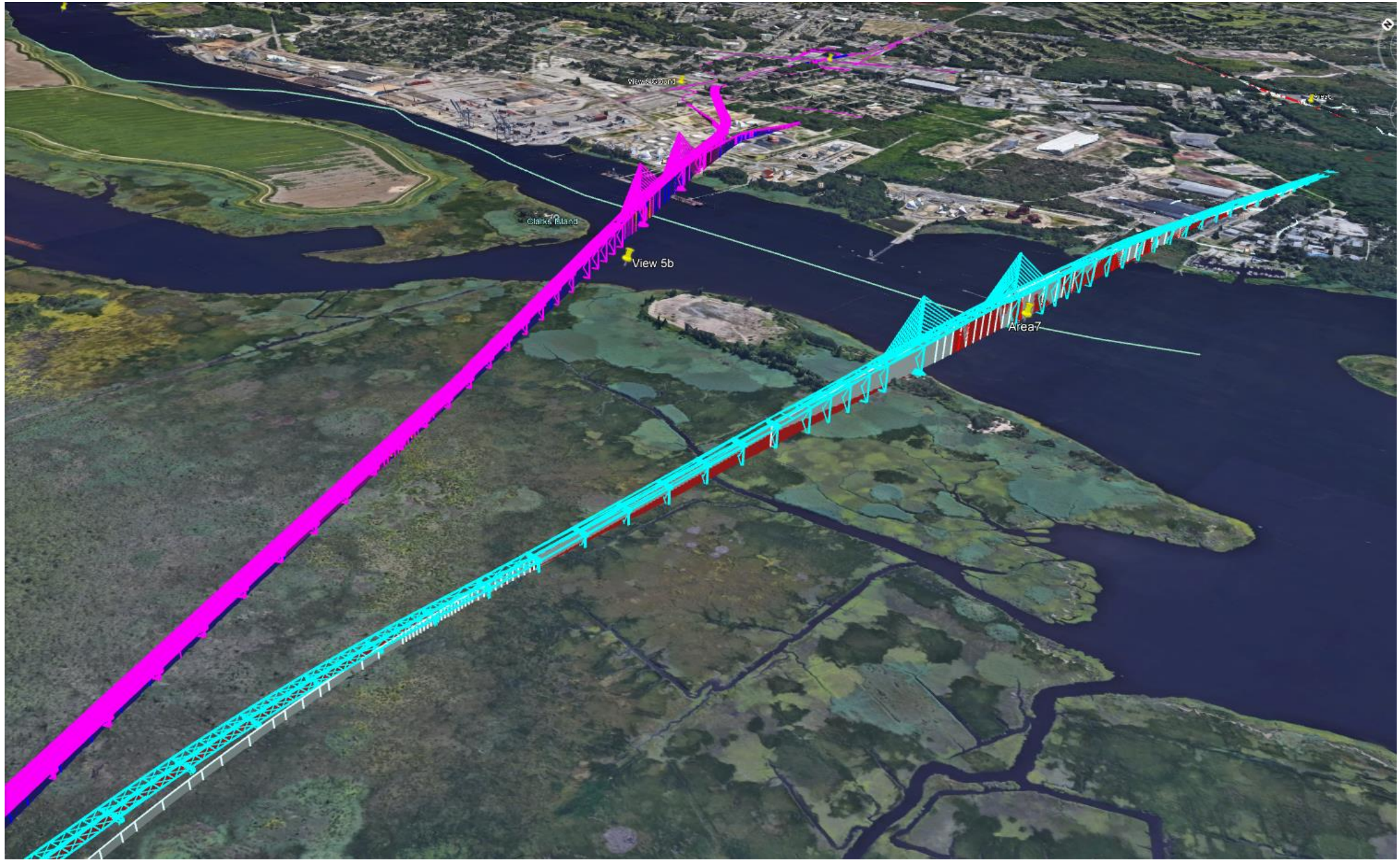


Video/Visualization

KMZ


Preferred Alternative (DSA 2)
LEGEND
Lane Arrow
Proposed Pavement
Proposed Structures
Proposed Edge Of Travel
Proposed Right Of Way
Proposed Pavement Remov
Orange Corridor
Green Corridor
Mint Corridor
DISCLAIMER This information is int
reference only; NCDOT is not res
accuracy or use. The project locati
preliminary and is subject t
APRIL 2016
Raleigh
Knightdale
Garner
Holly Springs
Holly Spri
DISCLAIMER This information is intended for general reference only; NCDOT is not responsible for its accuracy or use. The project location and design is preliminary and is subject to change.
APRIL 2016
If you agree with this disclaimer uncheck the box next to AGREE and check the boxes next to Legend and in the Temporary Places window to continue.

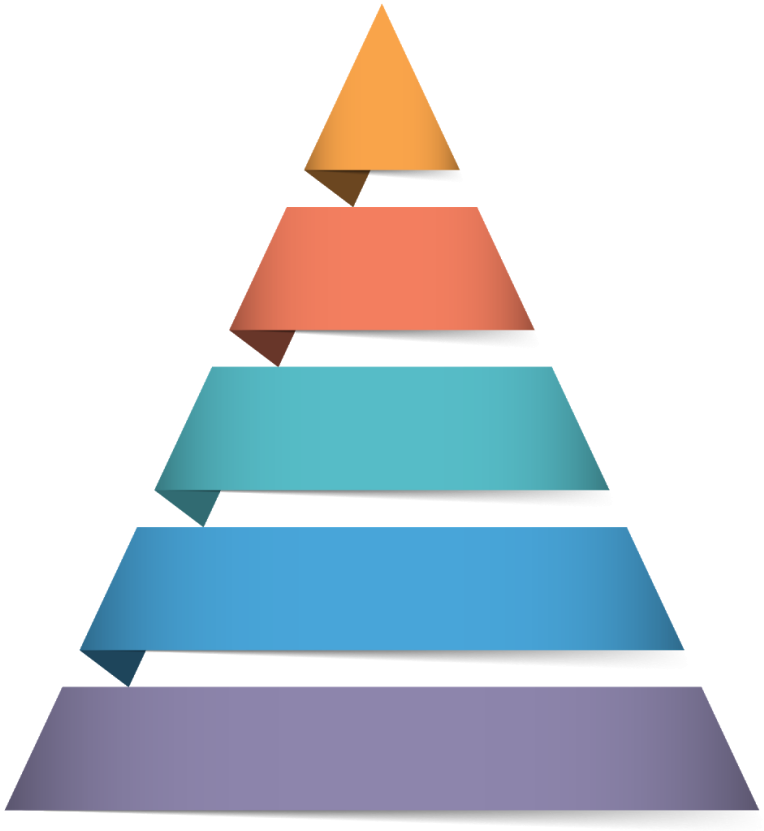
KMZ



Online Engagement Tools

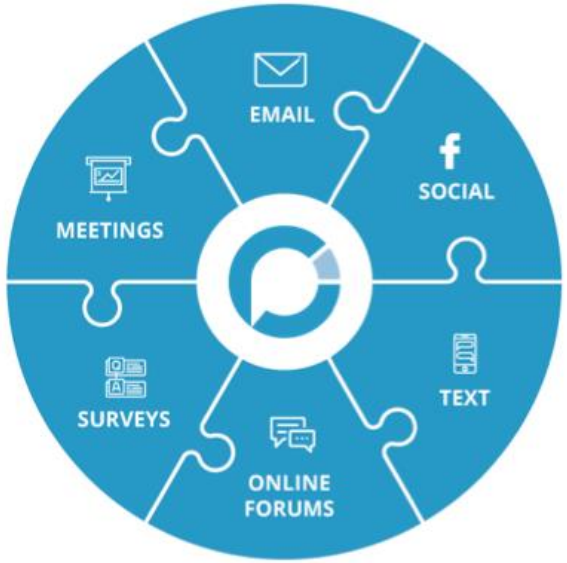
Online Engagement Tools

Pyramid of Engagement

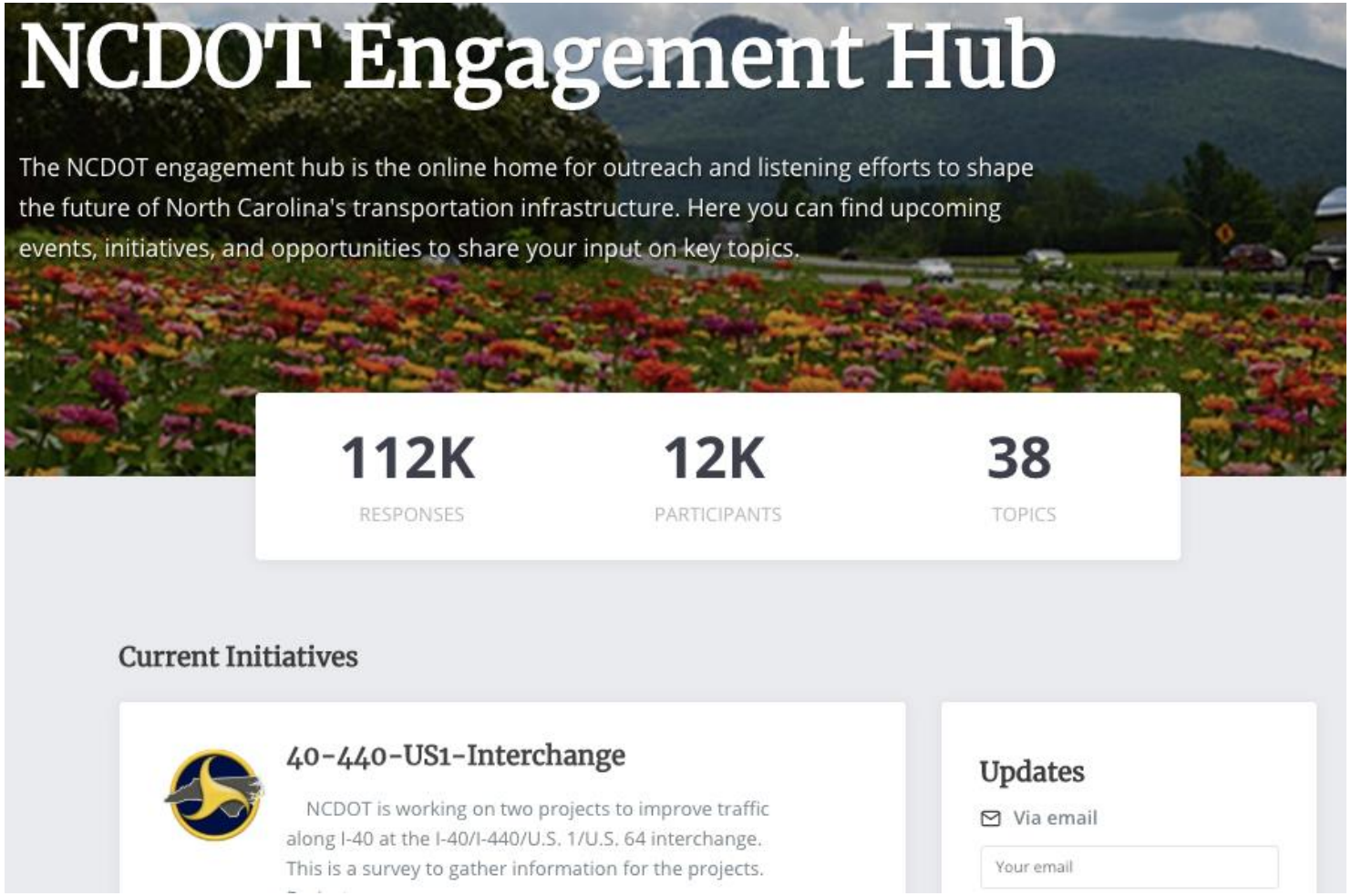


- Build Trust
- Close the Loop
- Capture and Analyze
- Lower Barriers to Participation
- Reach beyond Self Selectors

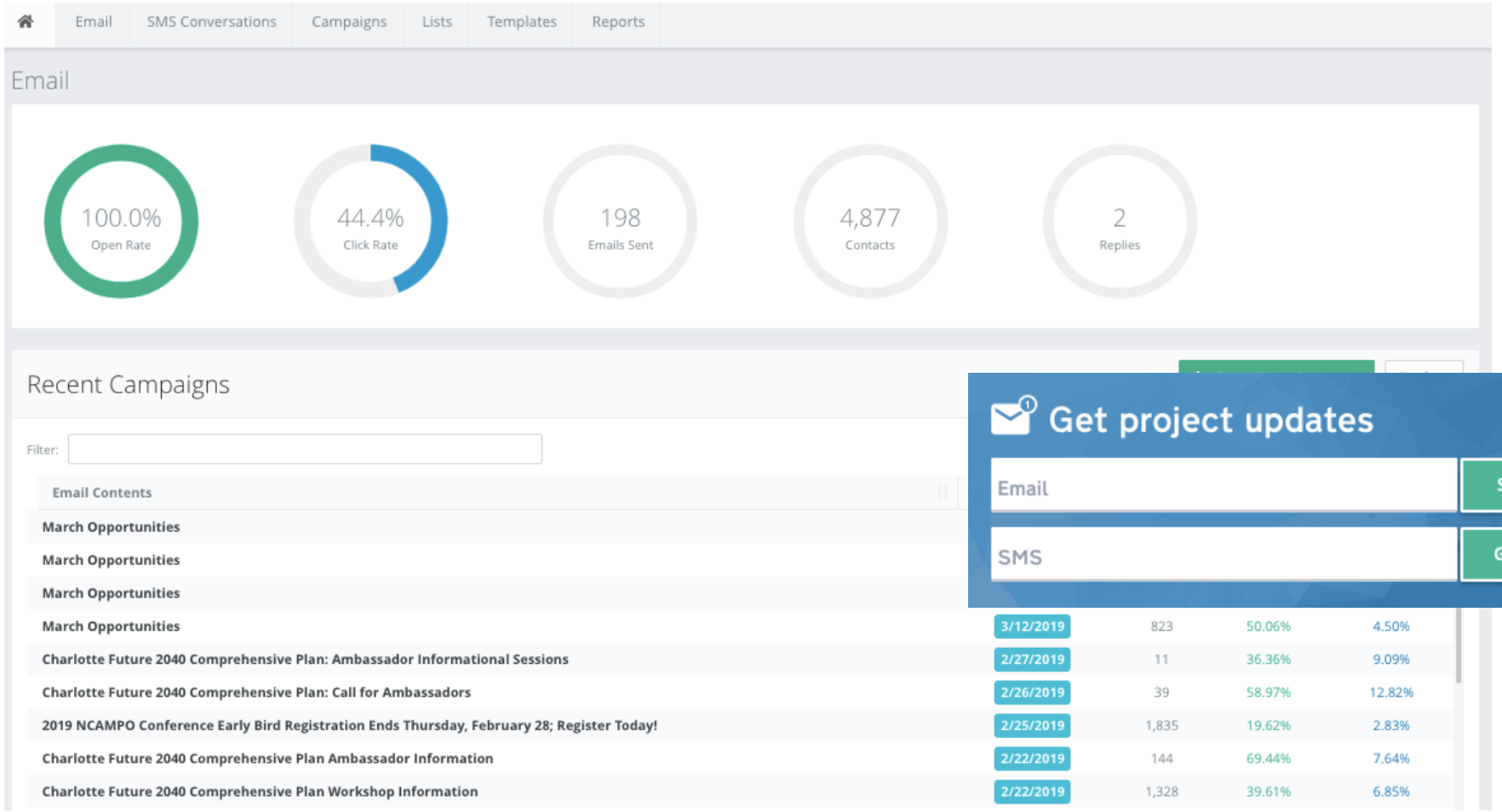
Integrated Toolkits Save Time

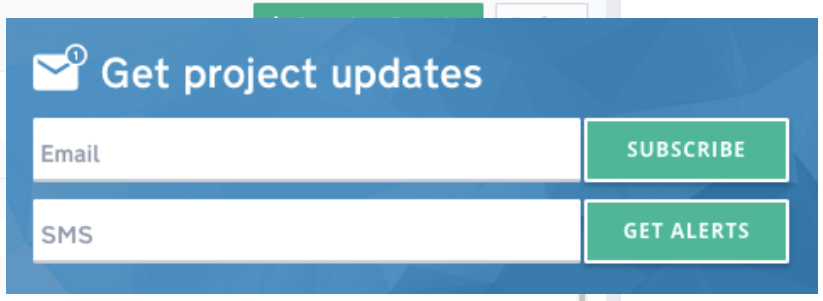


One Stop Shop

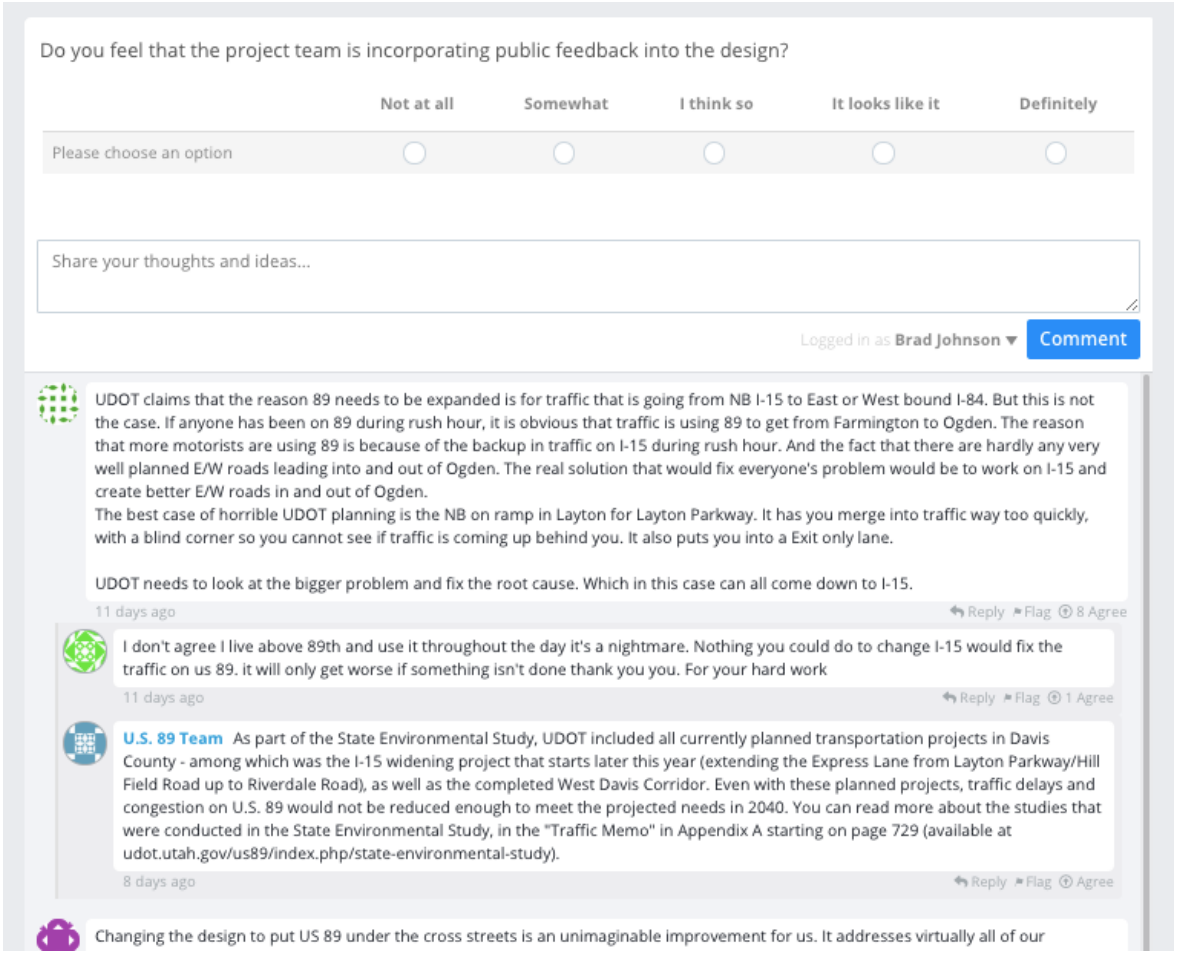


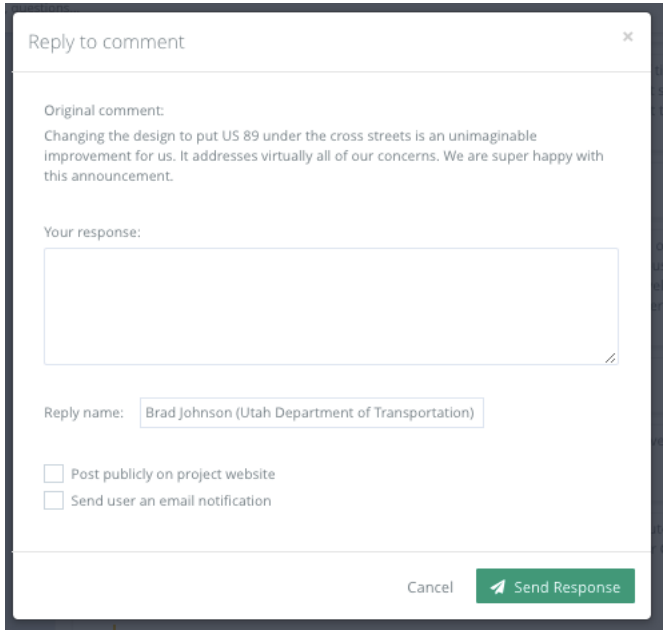
Outreach Integration



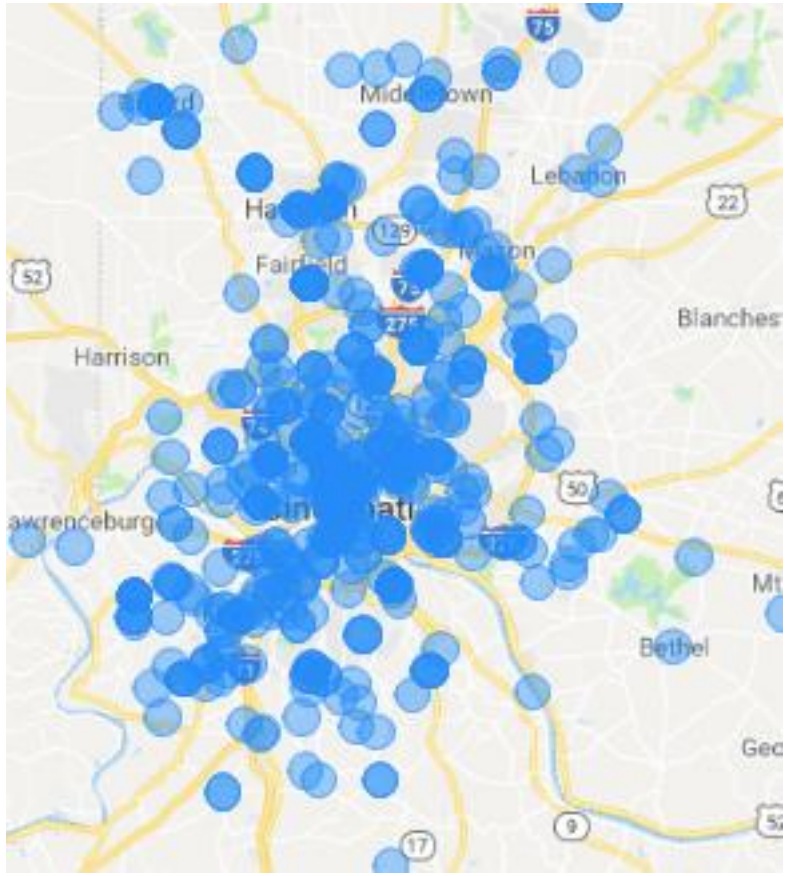


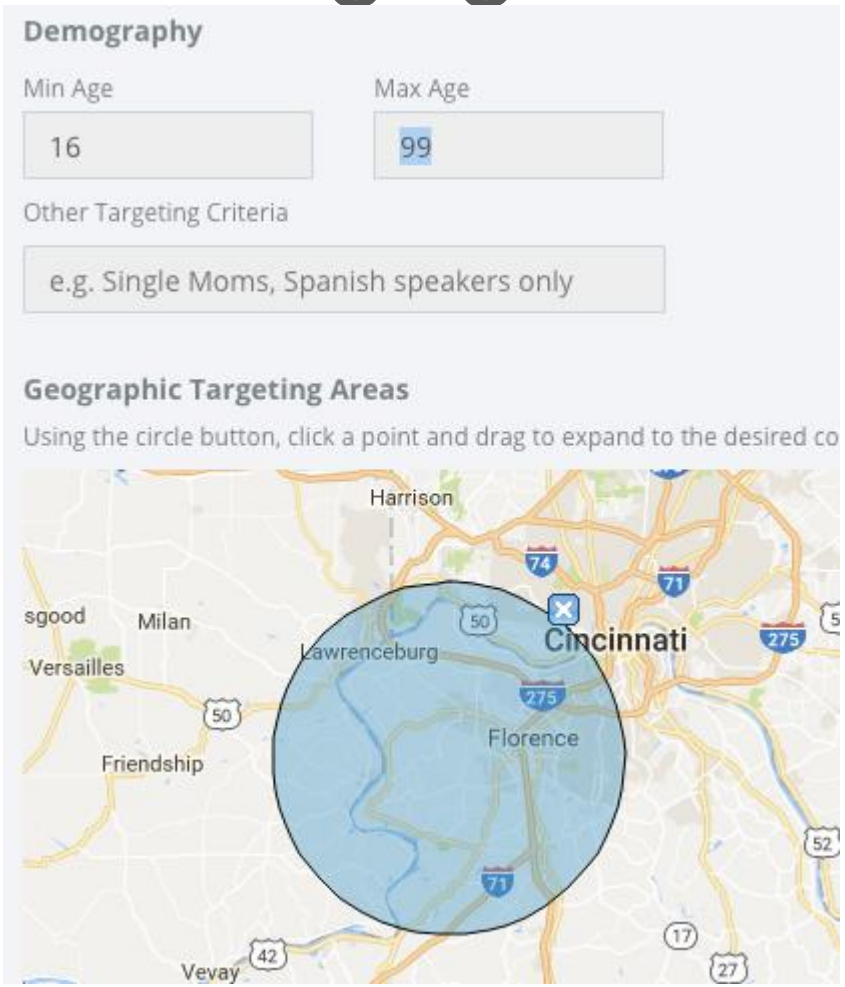
Conversations with Integrated Replies



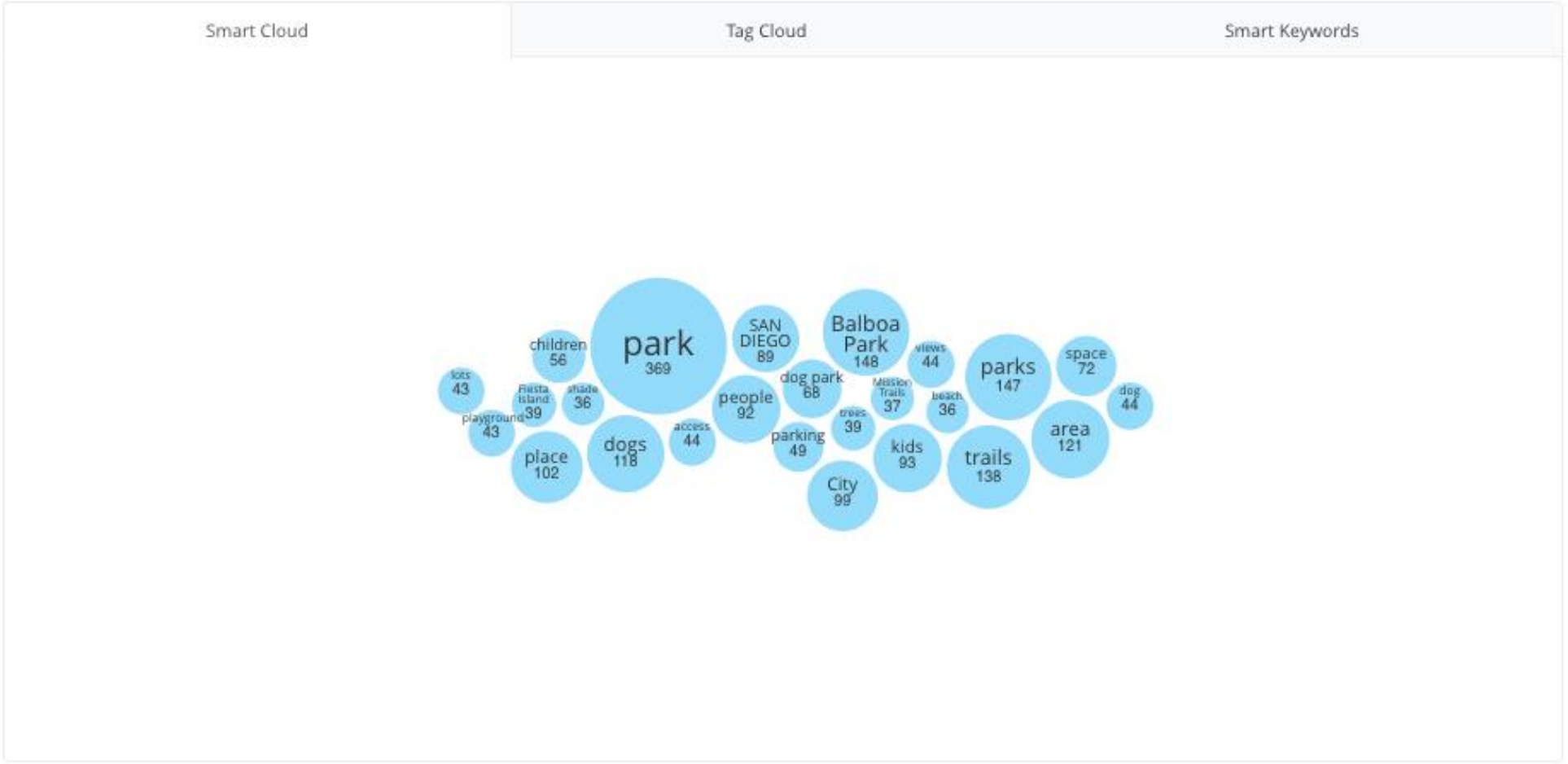


Geo-Targeting based on Engagement

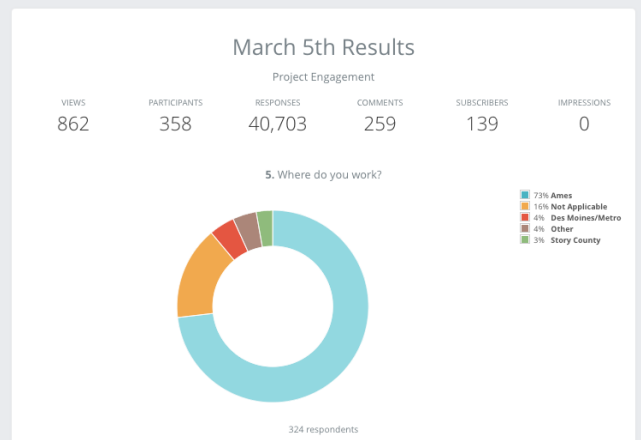


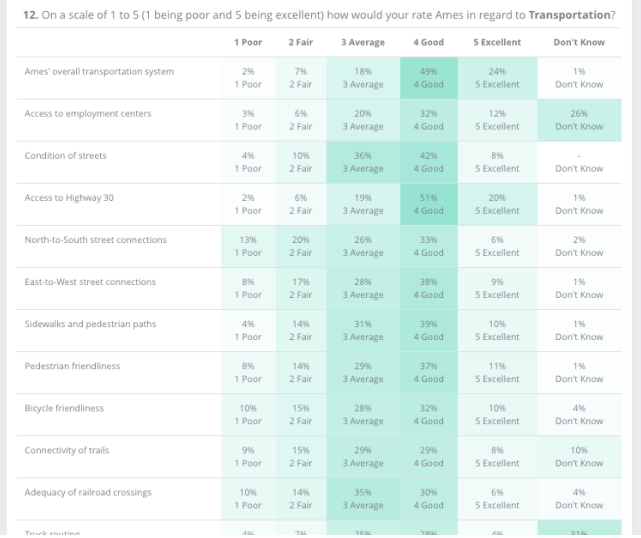


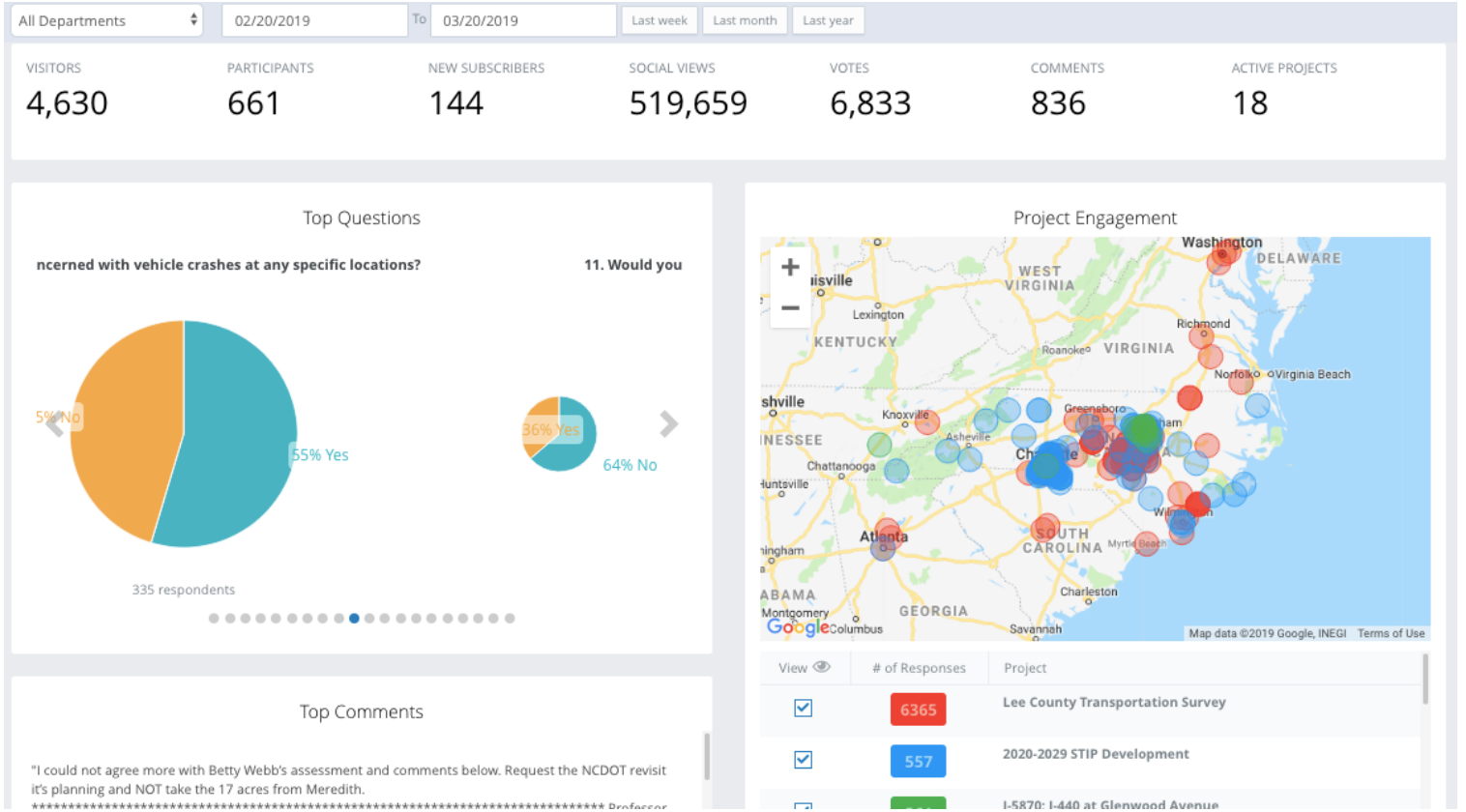
Human and Artificial Intelligence for Comment Analysis and Moderation



Realtime Sharable Reporting

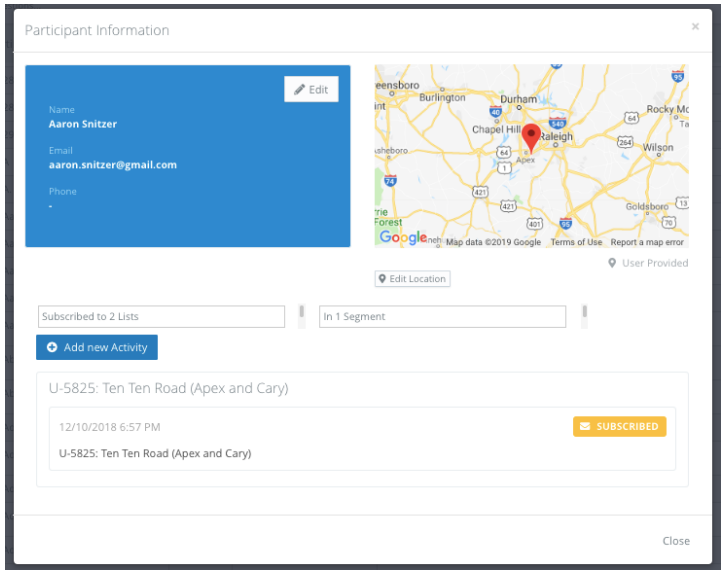






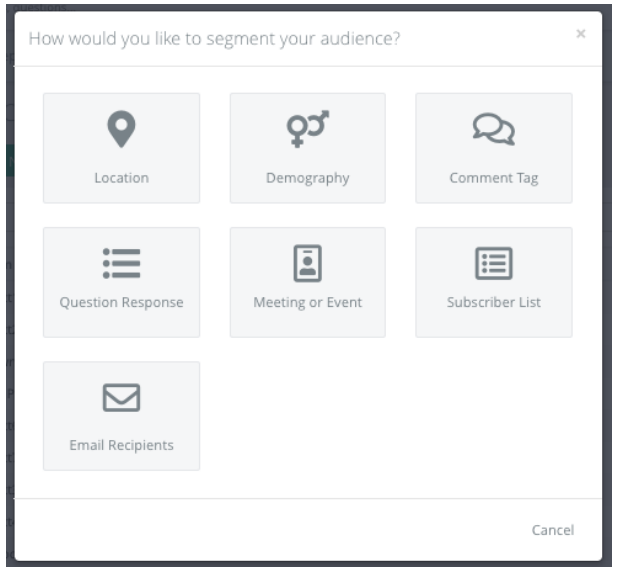
Seamless Integration of Meeting Data

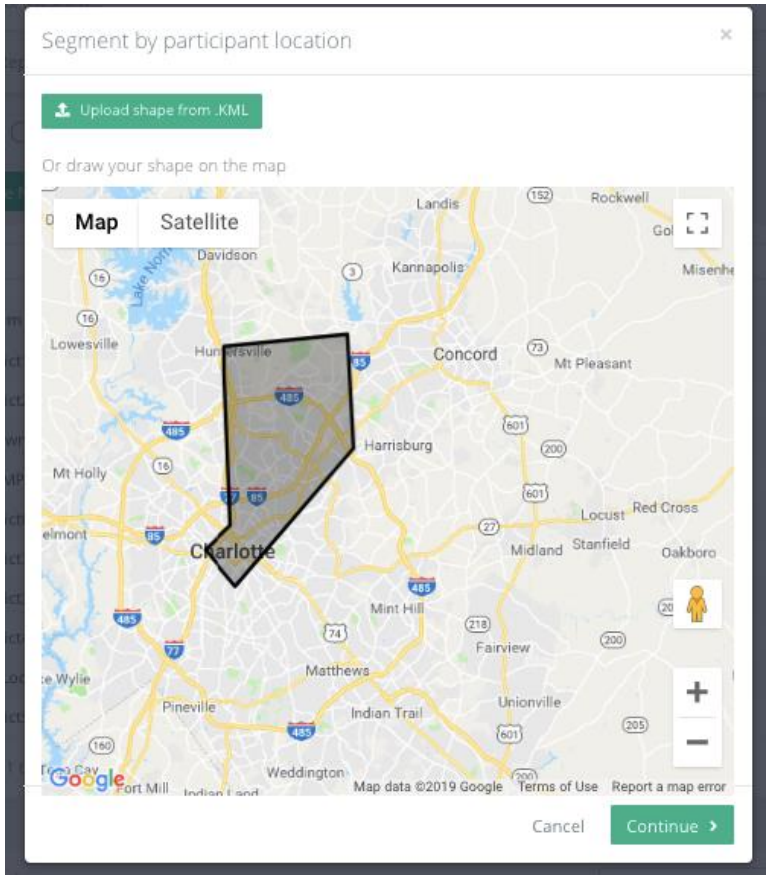
Citizen Relationship Manager

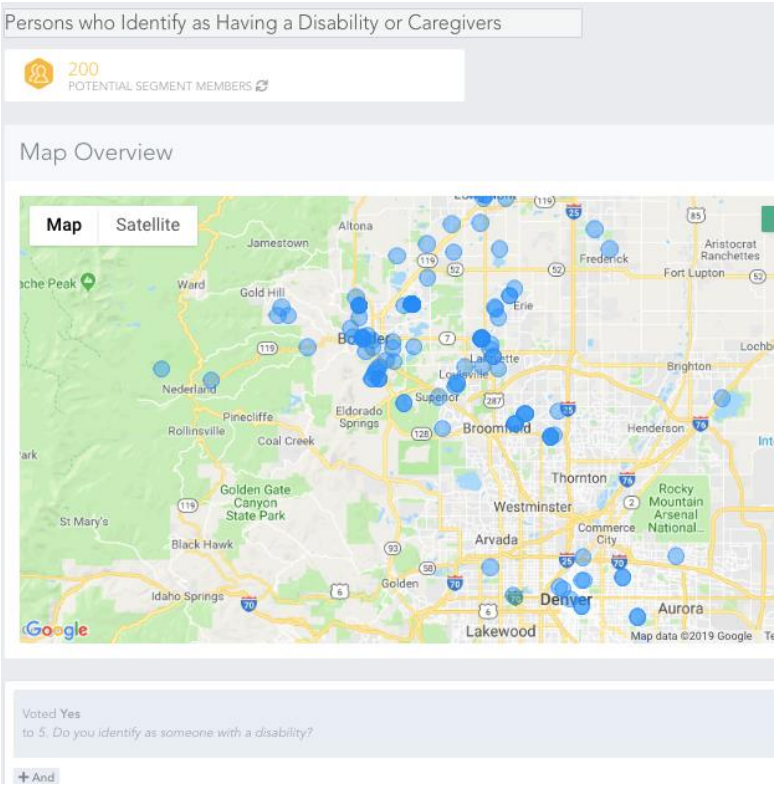


Contact First Name	Contact Last Name	Contact Simplified Name	Activity Type	Description	Note	Activity Da	Address	Zip Code	Phone	Email
Jennie	Kirkley	Jennie Kirkley	Subscribed	Subscribed U-5769: N.C. 16 (Providence Road)		3/6/2019	1902 Harri	28173		jennie.torres@hotmail.com
Jennie	Kirkley	Jennie Kirkley	Subscribed	Subscribed U-5769: N.C. 16 (Providence Road)		3/6/2019	1902 Harri	28173		jennie.torres@hotmail.com
Matt	Bland	Matt Bland	Subscribed	Subscribed P-5706: East Durham Rail Safety Project		3/6/2019	1200 Perry	27502		mbland@blandlandscaping
			Subscribed	Subscribed I-485 and US 74 Express Lanes Network		3/6/2019		28173		Bitsys@gmail.com
FRANCES	NESMITH	FRANCES NESMITH	Subscribed	Subscribed Walnut to Wade		3/7/2019	411 ELSMO	28562		heyhm1@gmail.com
Bruce	Stanley	Bruce Stanley	Survey Response	Responded To 2020-2029 STIP Development		3/7/2019		27609		Bruce1105nc@gmail.com
Sallie	Ellinwood	Sallie Ellinwood	Survey Response	Responded To 2020-2029 STIP Development		3/7/2019	3828 Carne	27612		sallieellinwood@earthlink.r
Huiying	Fan	Huiying Fan	Subscribed	Subscribed NC Moves 2050 - Table Topics Host Application		3/7/2019		27707	+1984209(	hf63@duke.edu
Huiying	Fan	Huiying Fan	Subscribed	Subscribed NC Moves 2050 - Table Topics Host Application		3/7/2019		27707	+1984209(	hf63@duke.edu
Huiying	Fan	Huiying Fan	Subscribed	Subscribed NC Moves 2050 - Table Topics Host Application		3/7/2019		27707	+1984209(	hf63@duke.edu
Huiying	Fan	Huiying Fan	Subscribed	Subscribed NC Moves 2050 - Table Topics Host Application		3/7/2019		27707	+1984209(	hf63@duke.edu
Huiying	Fan	Huiying Fan	Subscribed	Subscribed NC Moves 2050 - Table Topics Host Application		3/7/2019		27707	+1984209(	hf63@duke.edu
David	W	David W Puckett	Subscribed	Subscribed U-5991: N.C. 43 (Charles Blvd)		3/7/2019		27858		gousaf19701992@outlook.
Alan	Newton	Alan Newton	Subscribed	Subscribed U-5991: N.C. 43 (Charles Blvd)		3/8/2019		27858		anewton2k@gmail.com
Eleftheria	Kontou	Eleftheria Kontou	Subscribed	Subscribed NC Moves 2050 - Table Topics Host Application		3/8/2019		27707	+1703568	ekontou@email.unc.edu
Eleftheria	Kontou	Eleftheria Kontou	Subscribed	Subscribed NC Moves 2050 - Table Topics Host Application		3/8/2019		27707	+1703568	ekontou@email.unc.edu
Eleftheria	Kontou	Eleftheria Kontou	Subscribed	Subscribed NC Moves 2050 - Table Topics Host Application		3/8/2019		27707	+1703568	ekontou@email.unc.edu
Phillip		Phillip	Survey Response	Responded To 2020-2029 STIP Development		3/8/2019	1900 Varne	27612		pperkinson@gmail.com
Rhonda	Bishop	Rhonda Bishop	Subscribed	Subscribed U-5769: N.C. 16 (Providence Road)		3/8/2019	2006 CHAD	28173		rr.bishop.72@gmail.com
Gene	Vincent	Gene Vincent	Subscribed	Subscribed U-5991: N.C. 43 (Charles Blvd)		3/8/2019		27858		gvince5353@gmail.com
Heidi	Perry	Heidi Perry	Subscribed	Subscribed NC Moves 2050 - Table Topics Host Application		3/8/2019		27510	+1919618	heidiperov@gmail.com
Heidi	Perry	Heidi Perry	Subscribed	Subscribed NC Moves 2050 - Table Topics Host Application		3/8/2019		27510	+1919618	heidiperov@gmail.com
Heidi	Perry	Heidi Perry	Subscribed	Subscribed NC Moves 2050 - Table Topics Host Application		3/8/2019		27510	+1919618	heidiperov@gmail.com
Steve	Smith	Steve Smith	Subscribed	Subscribed U-5769: N.C. 16 (Providence Road)		3/8/2019	1827 Therr	28173		TherrellFarmsNC@gmail.co
Isabelle		Isabelle	Subscribed	Subscribed U-5769: N.C. 16 (Providence Road)		3/9/2019	1423 Hawk	28173		ifaivre@yahoo.com
			Subscribed	Subscribed U-5769: N.C. 16 (Providence Road)		3/10/2019		28173		somerset2001@gmail.com
Donald	Edmonds	Donald Edmonds	Subscribed	Subscribed U-5769: N.C. 16 (Providence Road)		3/10/2019	3002 Fallo	28173		ourmail22@gmail.com
			Subscribed	Subscribed U-5769: N.C. 16 (Providence Road)		3/10/2019		28173		jbest30@hotmail.com
Lawrence	S.	Lawrence S. Craige	Subscribed	Subscribed College Road - Wilmington		3/11/2019		28401		lscraige@craigeandfox.com
Love,	Emily	Love, Emily	Subscribed	Subscribed Corridor K		3/11/2019				Emily.Love@stantec.com

Segment Participants for Reporting and Reengagement







Lessons Learned

- Aligning tools saves staff time
- Involve more participants in a process
- Use database tools to quickly analyze participant roles
- Ability to react immediately to needs
- Resource allocation becomes more clear

In Summary….Virtual Public Involvement

Yields better results

- More meaningful input
- More informed decision making
- More public buy-in
- Better projects

Thank You

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